



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

November 13, 1989

MINERALS FILE
- MISSING RECLAMATION
CONTRACT

TO: Board of Oil, Gas and Mining

THRU: Lowell P. Braxton, Associate Director, Mining *LAB*

FROM: D. Wayne Hedberg, Permit Supervisor/Hydrologist *DWH*

RE: Request for Board Concurrence, Amount and Form of Reclamation Surety, Utelite Mine, Utelite Corporation, M/043/004, Summit County, Utah

The Division seeks the Board's concurrence on the amount and form of reclamation surety to be provided by Utelite Corporation (Utelite) for continued operations at the Utelite Mine located in Summit County, Utah. Attached for your reference, is a copy of the executive summary, a location map, the reclamation surety estimate, the self bonding qualification sheet, and the form of reclamation surety (Self Bonding and Indemnity Agreement).

On January 15, 1988, the Division issued tentative approval for this existing operation. Since that time, the operator has submitted a 19-acre amendment to expand the extent of the mining operation. A revised reclamation surety estimate of \$101,800 (in 1994 dollars) has been calculated by the Division to reclaim portions of this minesite. The revised reclamation surety includes the projected reclamation costs (\$28,600) for the 19-acre East Pit expansion.

The operator has proposed that the majority of the pit disturbances associated with this operation be made part of the adjacent Summit County landfill upon cessation of mining operations. The Division has calculated a reclamation surety based upon a worst-case scenario (i.e., no landfill), because a firm commitment from Summit County could not be obtained at this time. When, and if, it becomes apparent that the county will use Utelite's pits as part of their landfill, then the operator can request a proportionate surety reduction from the Division.

Thank you for your time and consideration of this formal request for acceptance of the amount and form of reclamation surety.

DWH/jb
Attachments
MN2/67

DOGM MINERALS PROGRAM

CHECK LIST FOR BOARD APPROVAL
OF
FORM AND AMOUNT OF SURETY

Mine Name Utelite

File No. M/043/004

Item	Provided		Remarks
	Yes	No	
Executive Summary	X		
Location Map	X		
Reclamation Bond Estimate	X		
Signed Reclamation Contract		X	Blank form attached pending operator's signature.
Signed Power of Attorney/ Affidavit of Qualification		X	N/A
Bond/Reclamation Surety	X		Draft copy, Self Bonding and Indemnity Agreement.
Surety Signoff (Other State/Federal Agencies)		X	N/A

EXECUTIVE SUMMARY

Mine Name:	Utelite Mine	I.D. No.:	M/043/004
Operator:	Utelite Corporation	County:	Summit
	P. O. Box 387	New/Existing:	Existing
	Coalville, Utah 84017	Mineral Ownership:	BLM, Utelite, et al
		Surface Ownership:	Utelite, et al
Telephone:	801-359-8541	Lease No.(s):	
Contact Person:	Carsten Mortensen	Permit Term:	Life of Mine
Life of Mine:	30-50 years		

Legal Description: T1S, R5E, Sections 5 and 8

Mineral(s) to be Mined: "Manchos" shale (processed into expanded lightweight rock aggregate product).

Mining Methods: Open pit using dozers with rippers and wheel loaders.

Acres to be Disturbed: Total disturbance 74.5 acres.

Present Land Use: Mining, landfill.

Postmining Land Use: Landfill, grazing.

Variances from Reclamation Standards (Rule M-10) Granted: M-10(1) Landuse; M-10(5) Highwalls

SOILS and GEOLOGY:

Soil Description: Relatively thin rocky topsoil. @150,000 cubic yards topsoil and subsoil to be stripped.

pH: 6.6 to 8.0

Special Handling Problems: None

Geology Description: This 200 foot "Manchos" shale deposit strikes southwest with a dip ranging from 40 to 65 degrees northwest.

HYDROLOGY:

Groundwater Description: The "Manchos" shale is relatively impervious although a minor amount of groundwater does seep into the pit from the footwall from time to time. This does not create any operational problems.

Surface Water Description: Three Mile Creek traverses the property. The small creek is immediately adjacent to the operations and drains toward Rockport Reservoir.

Water Monitoring Plan: None required.

ECOLOGY:

Vegetation Type(s); Dominant Species: Bluebunch wheatgrass, Smooth Brome Grass
Indian Rice Grass, Sagebrush and Oak.

Percent Surrounding Vegetative Cover: @30%

Wildlife Concerns: None

Surface Facilities: Office, warehouse/maintenance buildings, processing plant,
covered processed ore storage building, raw ore stockpiles, etc.

Mining and Reclamation Plan Summary: _____

During Operations:

Shale will be mined with a dozer and conveyed to the kilns where it is processed into rock aggregate. Stripped overburden will be recontoured and seeded with native vegetative species. The stream channel on site will be ripped and seeded as necessary to control erosion.

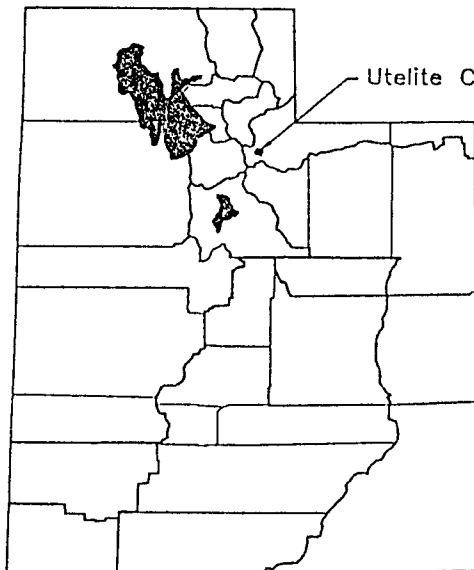
Following Operations:

The pit, access road, and usable buildings are proposed for use as a Summit County landfill when the site is completely mined out. Unusable plant facilities will be removed or buried on site. The fill material will be layed back out of the stream channel, recontoured and the adjacent road moved further up slope. All areas not used for the landfill will be ripped and seeded.

SURETY:

Amount: \$101,800 (1994 dollars)
Form: Self Bond
Renewable Term: 5 year

MN13/35-36



Utelite Corporation

Present Extent of
Summit County
Landfill Borrow Area
15.4 acres

Pre-law Area
to be Reclaimed

Summit County Shop

Present Extent of
Summit County Landfill
2.4 acres

Projected Extent of
Summit County Landfill
63 acres

Topsoil Storage
0.5 acres
9000 cubic yards

Topsoil Storage
1.3 acres
25,100 cubic yards

Proposed East Pit
Expansion
19.0 acres

Scrap Yard and
Temporary Impoundment Area
4.5 acres

West Pit Area Unsuitable
for Landfill Use
2.3 acres

Waste Area
3.0 acres

TOTAL DISTURBED

ACREAGE 74.5

☆ Utelite Corporation will
reclaim these areas that
will not be suitable for
the County landfill.

Utelite Mine
Utelite Corporation
Summit County, Utah
M/043/004
Scale: 1"=600'

Map Compiled June 19, 1989



State of Utah
Natural Resources
Oil, Gas and Mining

615
718

514
819



Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

Wayne

October 25, 1989

TO: Lowell P. Braxton, Associate Director, Mining

FROM: D. Wayne Hedberg, Permit Supervisor/Hydrologist *DWH*

RE: Reclamation Bond Estimate, Utelite Corporation, Utelite Mine, M/043/004, Summit, Utah

This memorandum is prepared pursuant to your instructions of October 18, 1989, in which you requested that I review the Utelite file and prepare a revised reclamation surety estimate for the Utelite Mine. I have attached a revised surety estimate based upon my review of the correspondence files, maps, and previous surety estimates for this operation.

This estimate is prepared assuming a **"worst case" non-landfill scenario**. It is my understanding that we are prepared to accept the landfill as a reasonable postmining landuse. However, because we have no firm commitment from Summit County that they **will utilize** Utelite's mined-out pits as part of the county landfill, we will bond for a non-landfill provision. When, and if, it becomes apparent that the county will use Utelite's pits as part of their landfill, then the operator can request a proportionate bond reduction from the Division.

I have used both reclamation surety estimates, as previously prepared by Frank Filas and Scott Johnson, to prepare the latest reclamation estimate. Frank's August 17, 1987, \$73,200 (1994 dollars) reclamation estimate was prepared assuming a non-landfill postmining landuse. Scott Johnson's June 20, 1989, \$34,000 (1994 dollars) estimate was prepared assuming acceptance of the county landfill postmining landuse. Scott's reclamation estimate includes a new (19 acre) East Pit expansion, while Frank's does not. The East Pit reclamation in 1994 dollars equals \$28,600. Adding this value to Frank's \$73,200 estimate yields a total of \$101,800 (1994 dollars). This figure should be used as the basis for the self-bonding proposal before the Board of Oil, Gas and Mining.

DWH/jb

Attachments

cc: Carsten Mortensen
Barbara Roberts
Dianne Nielson

MN2/66

(BONDING SUPPLEMENT)

Reclamation Estimate for UTELITE CORPORATION
UTELITE MINE Summit County M/043/004

Prepared by DOGM - October 25, 1989

Description	Quantity	Unit	\$/Unit	Cost (\$)
East Pit Reclamation (from S. Johnson estimate)				
Regrade for Uniformity	19.0	Acres	400	7,600
Spread Topsoil	34,100	Cubic Yards	0.35	11,940
Revegetate	19.0	Acres	215	<u>4,090</u>
Subtotal			(1989 \$)	23,630
Non-landfill Reclamation (from F. Filas estimate)				(1987 \$) 57,900
Inflated to 1989 Dollars				<u>60,420</u>
Totals				84,050
Add Contingency (10%)				<u>8,400</u>
TOTAL RECLAMATION COST (1989 Dollars)				92,450
TOTAL RECLAMATION COST (1994 Dollars) @ 1.93% Annual Inflation				101,800

Summary of The Reclamation Bond Estimate
Utelite Mine, M/043/004
(Nonlandfill Scenario)

<u>Item</u>	
A. Demolition and Cleanup	\$25,500
B. Soil Placement, Grading and Ripping	25,300
C. Seeding and Fertilizing	<u>7,100</u>
	\$57,900
D. 10 Percent Contingency	<u>5,800</u>
Total in 1987 Dollars	\$63,700

Inflation Factor of Two Percent Per Year
For Seven Years

Total in 1994 Dollars \$73,200

Reclamation Bond Estimate
Utelite Mine, M/043/004
August 17, 1987

by
Frank Filas

General:

This estimate was based on a nonlandfill reclamation scenario. A number of assumptions had to be made in preparing this estimate since the reclamation plan presumes that the mine will eventually be converted to a landfill. These assumptions are detailed in the reclamation estimate. Unit costs for equipment are based on the Blue Book rental rate plus the hourly operating cost. Labor rates are from the Means Site Work Cost Data book and include benefits and subcontractors profit.

A. Demolition and Cleanup

Tear down and remove concrete storage building and shop-office building. This is assuming that this will require two weeks with crew listed below. This is also assuming that equipment and metal bins are salvageable at no additional cost to the operator.

MANPOWER AND EQUIPMENT	\$COST/HR	HRS.	\$COST
1 Outside Foreman	32.85	80	2,628
2 Laborers	23.05 ea	80	3,688
1 Equipment Operator	29.85	80	2,388
2 Truck Drivers	23.80 ea	80	3,808
1 Front End Loader (2.5 CY)	61.00	80	4,880
2 Dump Trucks, 16 Ton	50.60 ea	80	8,096
Subtotal			\$25,488

B. Soil Placement, Grading, and Ripping

1. Haul soil material from waste area to cover pit floor.

Assume: a. Highwalls are granted a revegetation variance.

- b. One foot of soil is placed over a 1600 foot x 200 foot area (11,850 CY).
- c. Use of a 16 CY Scraper on a 2000 foot haul with unfavorable grade and 50 minutes per hour operating efficiency (83 CY/HR - Cat Handbook).

Result: $11,850 \text{ CY} \div 83 \text{ CY/HR} = 142.7 \text{ HRS}$

2. Regrade and rip disturbed area. Break up and bury foundations, and reroute county road away from stream channel.

Assume: a. Disturbed Area

	<u>Acres</u>
20 percent of Waste Dump	2.0
Pit Floor	7.3
Plant Site	7.3
Product Storage Area	3.5
Stream Channel Area	4.0
	<u>24.1</u>

- b. Use of a D-8 with ripper at .5 ACRE/HR

Result: $24 \text{ ACRES} \div .5 \text{ ACRE/HR} = 48 \text{ HRS}$

<u>MANPOWER AND EQUIPMENT</u>	<u>\$COST/HR</u>	<u>HRS.</u>	<u>\$COST</u>
1 D-8 W/Ripper	134.07	48	6,435
3 16 CY Scrapers	80.19	48	11,547
4 Equipment Operators	29.85	48	5,731
1 Outside Foreman	32.85	48	1,577
	Subtotal		\$25,290

C. Seeding and Fertilizing

Assume: 1. 24 acres to be seeded and fertilized with farm tractor and drill seeder at .75 acre/hr. Assume that 80 percent of waste area has already been revegetated.

2. 20 pounds of seed per acre at \$150/acre and 200 pounds of fertilizer per acre at \$50/acre.

Result: $24 \text{ ACRES} \div .75 \text{ ACRE/HR} = 34 \text{ HRS}$
Seed and Fertilizer = \$200/ACRE

<u>MANPOWER AND EQUIPMENT</u>	<u>\$COST/HR</u>	<u>HRS.</u>	<u>\$COST</u>
Farm Tractor W/Drill Seeder	25.00	32	800
1 Tractor Driver	23.45	32	750
1 Laborer	23.05	32	738
Seed and Fertilizer			<u>4,800</u>
	Subtotal		\$7,088

clj
1243R/47-49

Reclamation Estimate for Utelite Corporation
 Utelite Mine Summit County M/043/004

Prepared By Utah State Division of Oil, Gas and Mining
 October 24, 1989

Description	Quantity	Unit	\$/Unit	Cost (\$)
Plant Site Reclamation				
The scrap value of the plant exceeds the removal cost. The Summit County landfill is expected to cover the foundations.				
Impoundment Reclamation				
Fill Void with Overburden	2000	Cubic Yards	0.60	1,200
Revegetate	4.5	Acres	215	970
Subtotal				----- 2,170
Waste Dump Reclamation				
Revegetate	3.0	Acres	215	650
West Pit Reclamation				
Regrade for Uniformity	2.3	Acres	400	920
Revegetate	2.3	Acres	215	490
Subtotal				----- 1,410
East Pit Reclamation				
Regrade for Uniformity	19.0	Acres	400	7,600
Spread Topsoil	34,100	Cubic Yards	0.35	11,940
Revegetate	19.0	Acres	215	4,090
Subtotal				----- 23,630
Totals				=====
Add Contingency (10%)				27,860
				2,790
TOTAL RECLAMATION COST (1989 Dollars)				----- 30,650
TOTAL RECLAMATION COST (1994 Dollars) @ 1.93% Annual Inflation				34,000

Reclamation Estimate for Utelite Corporation
 Utelite Mine Summit County M/043/004

Prepared By Utah State Division of Oil, Gas and Mining
 October 24, 1989

Cost Parameters Used

D-8 Dozer (0&0)	160	\$/hour
988B Wheel Loader (0&0)	165	\$/hour
Labor Only	24	\$/hour
Farm Tractor (0&0)	67	\$/hour
Speed	4	mph
Width of Pass	6	feet

Revegetation Cost per Acre	Quantity	Unit	\$/Unit	Total Cost (\$)
Bare Costs				
Seed Mix	20	Pounds	9	180
Application Costs				
Seed Mix (drilled)	0.5	Hours	24	12
Scarify (tractor with chain)	0.3	Hours	67	23
Subtotal				35
Total Revegetation Cost per Acre				215

NONCOAL
(July 1989)

Mine Utelite Corporation
Permit No. M/043/004
Date November 13, 1989
Checked By _____

SELF BONDING QUALIFICATION SHEET

Applicant required to meet one of the following criteria:

1. Current rating for most recent bond issuance ("A" or higher) (Moody's Investor Service or Standard and Poor's Corporation)	<u>N/A</u>
---	------------

or

2. A. Tangible Net Worth = (at least \$10 Million) (Net worth minus intangibles [Goodwill and rights to patents or royalties])	<u>\$1,030,746.35</u>
B. Total Liabilities/Net Worth (2.5 times or less) =	<u>.08</u>
C. Current Assets/Current Liabilities (1.2 times or greater) =	<u>9.61</u>
Reference: _____	

or

3. A. Fixed assets in the United States (at least \$20 million) =	<u>\$2,899,782.71</u>
B. Total Liabilities/Net Worth (2.5 times or less) =	<u>.08</u>
C. Current Assets/Current Liabilities (1.2 times or greater) =	<u>9.61</u>
Reference: _____	

Has the operator been in continuous operation of not less than five (5) years (immediately preceding the time of application) (submitted five annual reports)? Yes <u>X</u> No _____	
Has the operator furnished financial statements prepared by an independent certified public accountant in conformity with generally accepted accounting principles? Yes <u>X</u> No _____	
Has the operator furnished unaudited financial statements for completed quarters in the current fiscal year? Yes _____ No <u>X</u>	
Has the operator supplied other useful information for determining financial qualifications? Yes <u>X</u> No _____	